MAXIM MR16 EVALUATION PLATFORM
User Manual

Rev 0; 3/15

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1 Introduction

The Maxim MR16 evaluation demo platform allows users to quickly demonstrate the compatibility and flicker-free operation of a MAX16840 based MR16 LED bulb and compare it with the performance of other bulbs. The demo platforms are available in a 110VAC version (MAX16840DEMO1#) and a 220VAC version (MAX16840DEMO2#), depending on the region of the world where it will be used.

The demo platforms are supplied with two bulbs: an OSRAM® MR16 bulb with the MAX16840 driver and **TBD** bulb with a competitor driver. In addition, any available bulb can be used to test the performance. By selecting one of the four ETs and then using the dimmer, the demo platform compares the flicker-free performance of the MAX16840 based bulb against the competitor driver based bulb.

1.1 Ordering Information

PART	DESCRIPTION
MAX16840DEMO1#	MAX16840 demo for dimmable MR16: 110VAC
MAX16840DEMO2#	MAX16840 demo for dimmable MR16: 220VAC

#Denotes a RoHS-compliant device that can include lead that is exempt under the RoHS requirements.

1.2 Package Contents

The MAX16840DEMO_# kit includes the following:

- MAX16840DEMO1# or MAX16840DEMO2#
- Quick Start Guide (print copy)

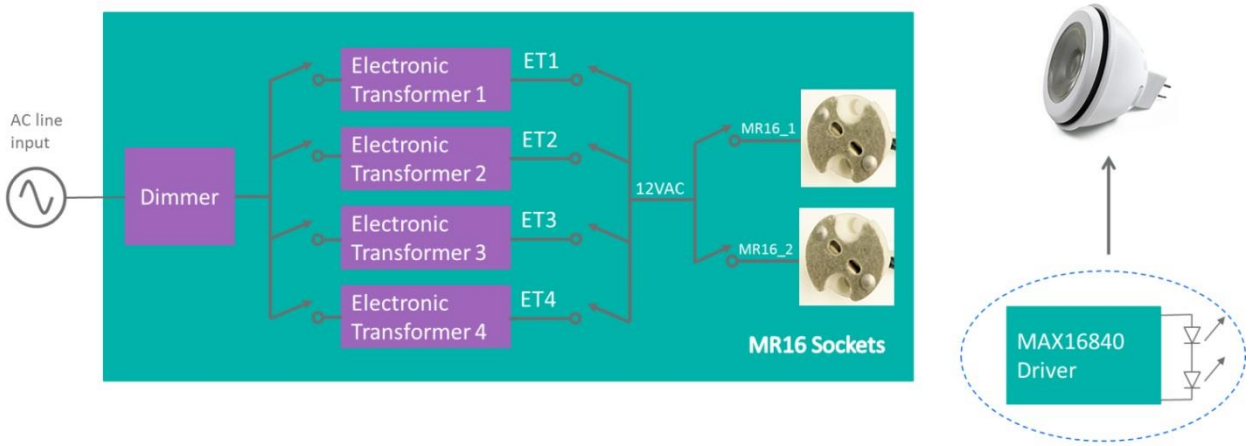
1.3 Quick Start Instructions

1) Plug the demo board into AC outlet. Ensure that you have the correct demo for your local AC voltage.
2) Plug the two bulbs into the MR16 sockets.
3) Using the switches on the bottom end, select one of the four electronic transformers and one of the MR16 bulbs.
4) Use the dimmer to turn on the corresponding bulb.
5) Cycle through the four transformers and look for flicker.

2 Hardware Description

This section provides more information on the hardware design of the board including the electronic transformers and the dimmers used.

2.1 Functional Diagram



The demo includes a set of four electronic transformers which convert the line voltage to the 12V required by the MR16 bulb. A trailing edge dimmer precedes the electronic transformers and is used to turn the bulbs on and off and to dim the bulbs.

2.2 Major Components

There are two versions of the demo, one for 110VAC line voltage and one for 220VAC line voltage.

	MAX16840DEMO1#	MAX16840DEMO2#
Line Voltage	110VAC	220VAC
Transformer 1	Hatch RS12-60M	xxxx
Transformer 2	LighTech LET60	xxxx
Transformer 3	B+L CV90001	xxxx
Transformer 4	xxxx	xxxx
Dimmer	Lutron SELV	Siemens 5TC8 284
Bulb 1	OSRAM Superstar MR16 35 24° adv - 830	xxxx
Bulb 2	OSRAM Superstar MR16 35 24° adv - 830	xxxx

It is extremely important that the correct version is used with the local line voltage. Failure to do so will damage the board, the bulbs, or both.

3 Contact Information

For more information about Maxim Integrated products, contact technical support at **www.maximintegrated.com/support**.

4 Trademarks

OSRAM is a registered trademark of Osram GmbH.

5 Revision History

REVISION NUMBER	REVISION DATE	DESCRIPTION	PAGES CHANGED
0	3/15	Initial release	—

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